

**ORIGINALLY SUBMITTED INFORMAL DRAWINGS**

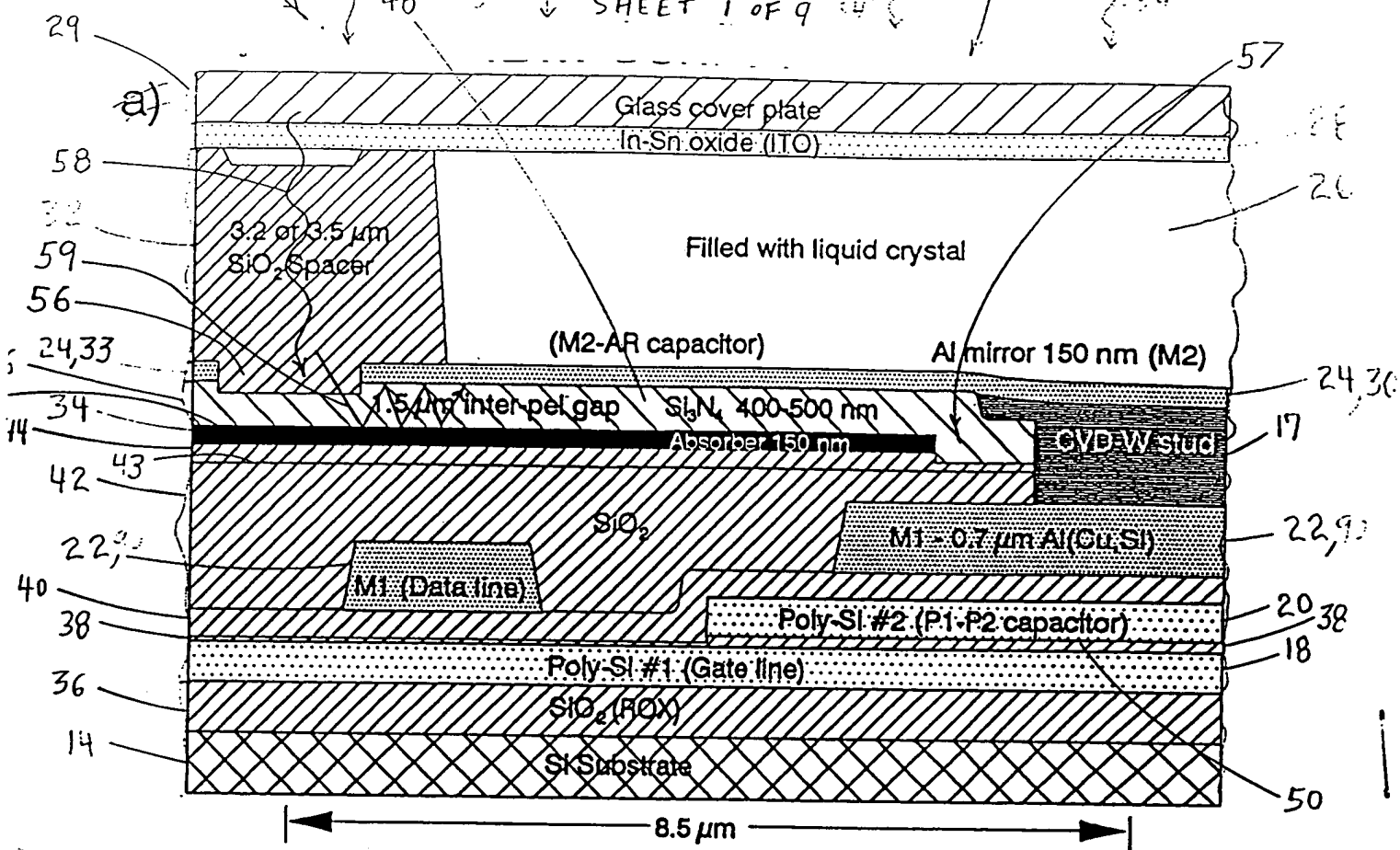


FIG 1

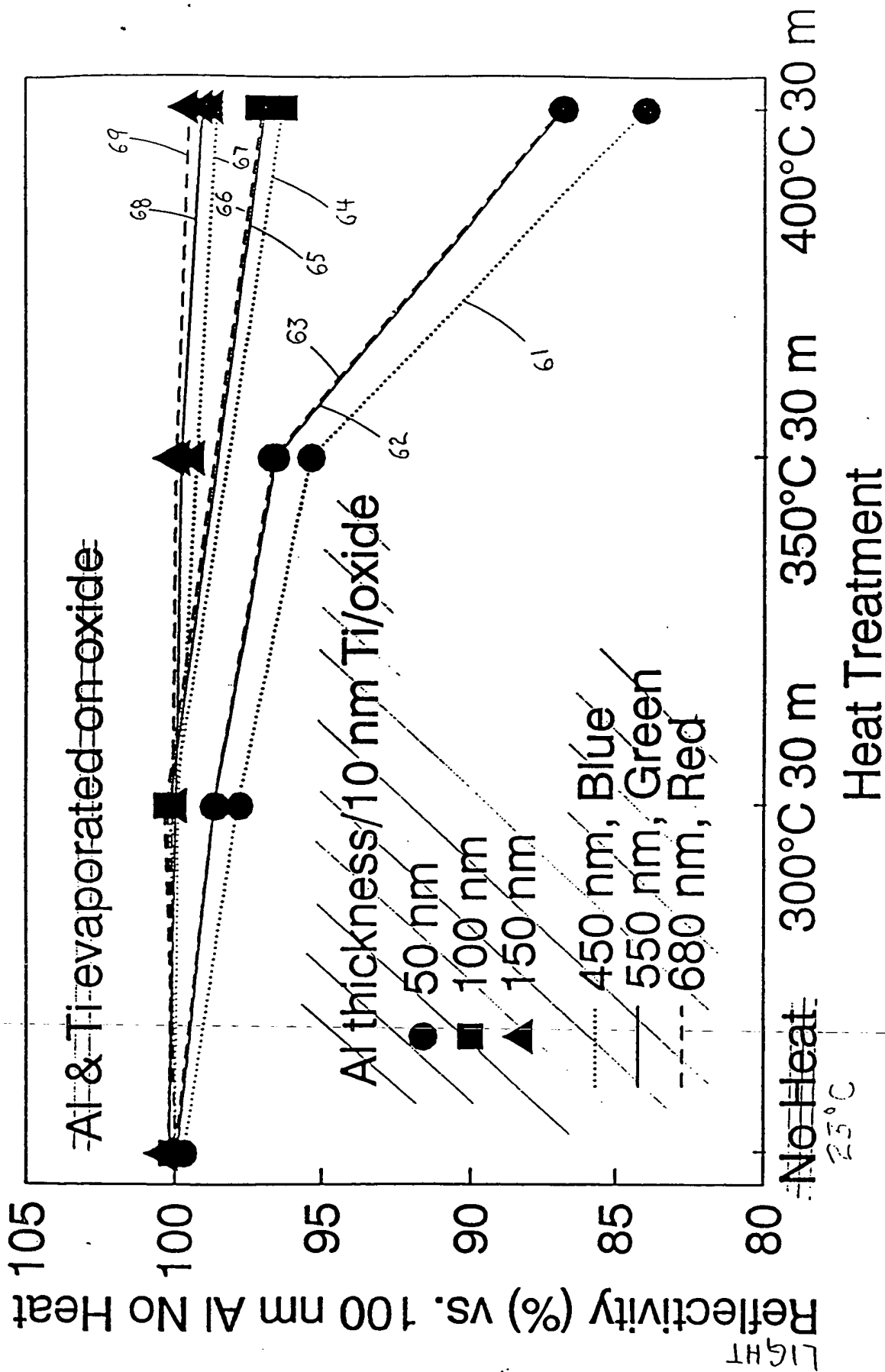


Fig. 2

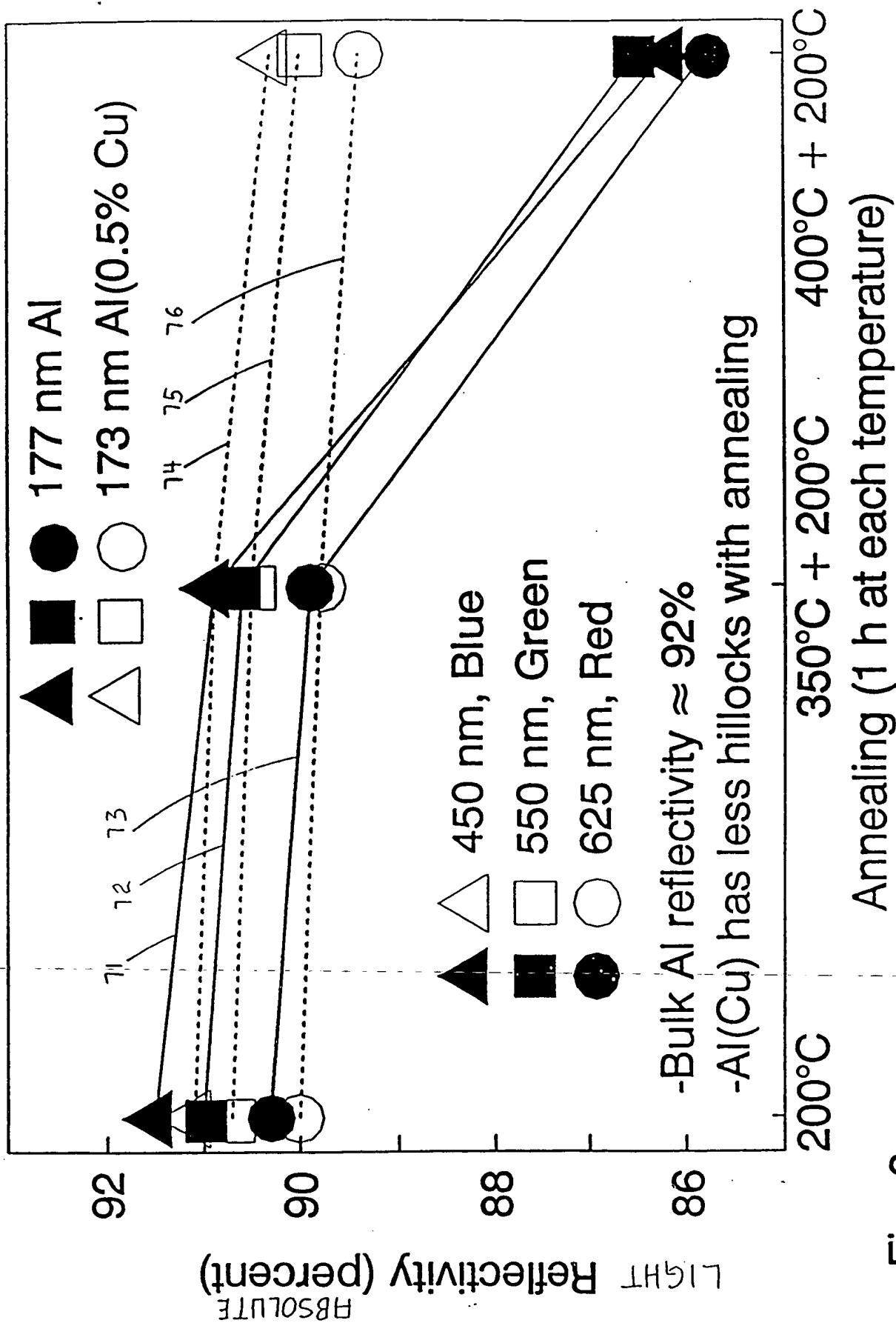


Fig. 3

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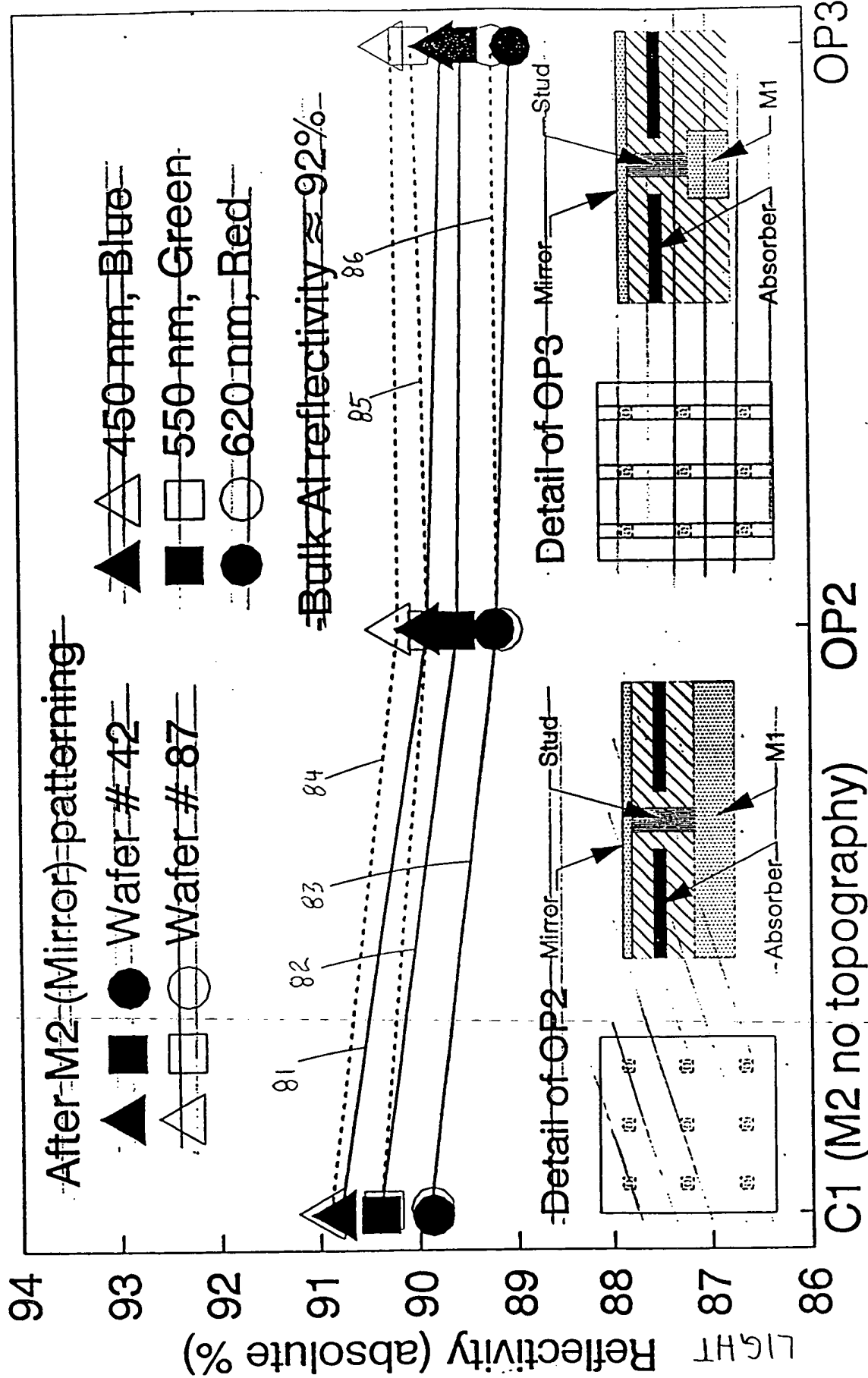


Fig. 4

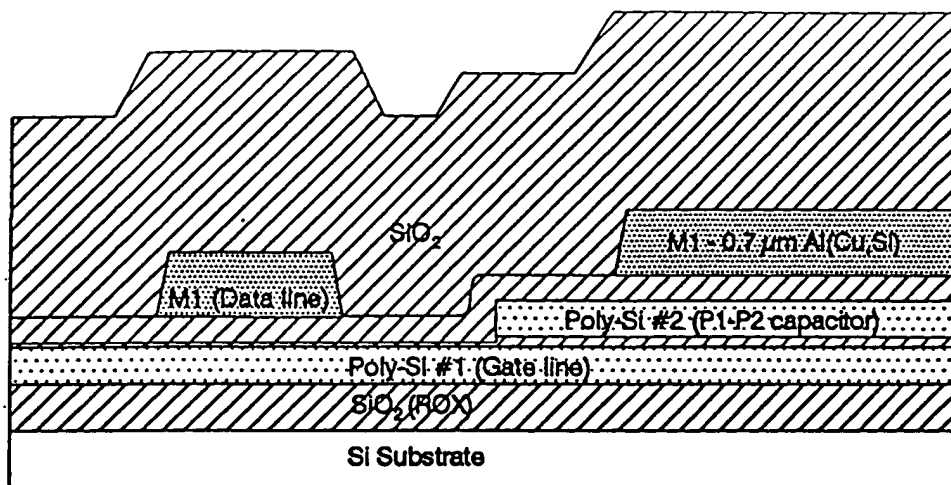


FIG 5

a) Liftoff 0.7 μm Al(Cu,Si) M1.  
Deposit thick oxide.

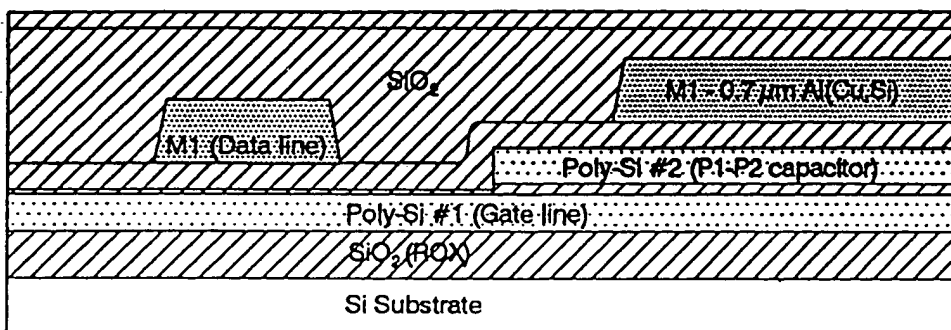


FIG 6

b) CMP oxide leaving 500 nm  
on highest M1 point.  
Deposit 200 nm oxide.

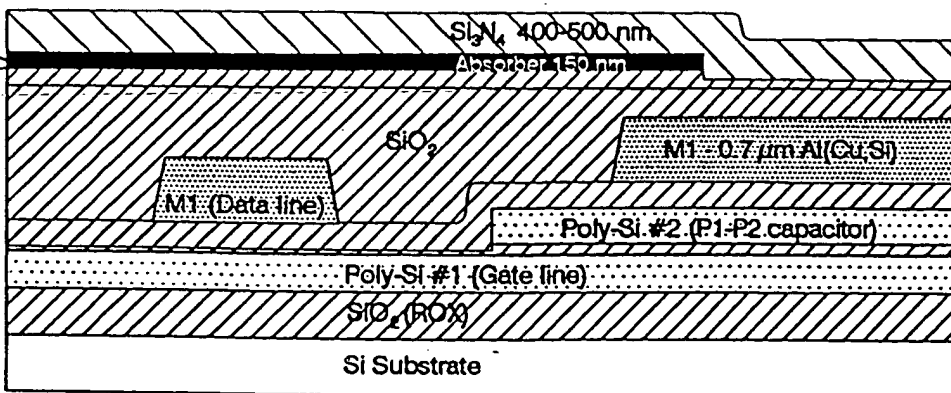


FIG 7

c) Deposit 10 nm Ti/ 100 nm  
Al/ 50 nm TiN, pattern with  
AR mask.  
Deposit 400-500 nm nitride.

Fig. 5(a-c)

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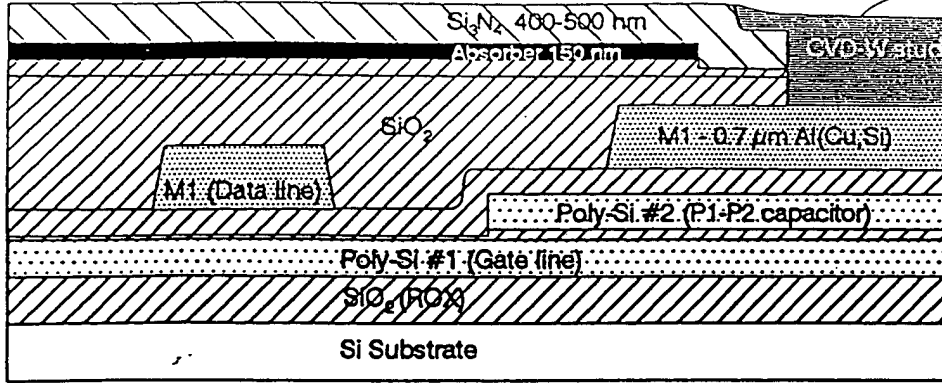


FIG 8

d) Pattern with V1 mask.  
Deposit liner & CVD-W.  
W Chem-mech polish.

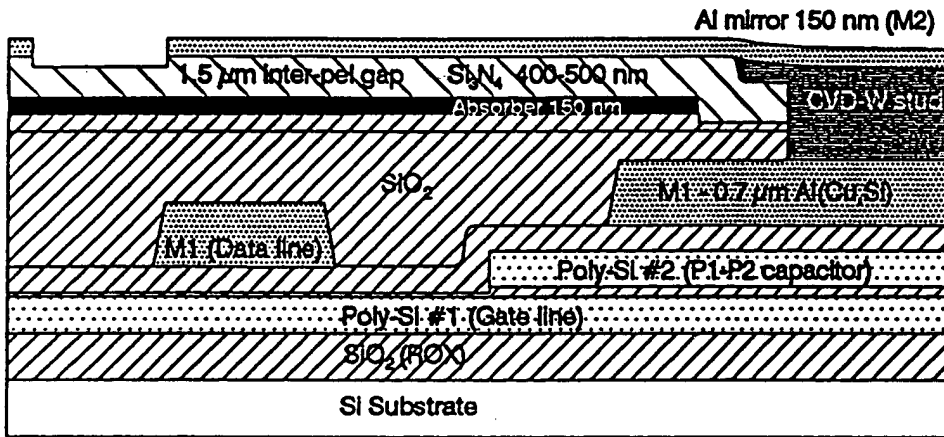


FIG 9

e) Deposit 10 nm Ti/ 150 nm  
Al, pattern with M2 mask.

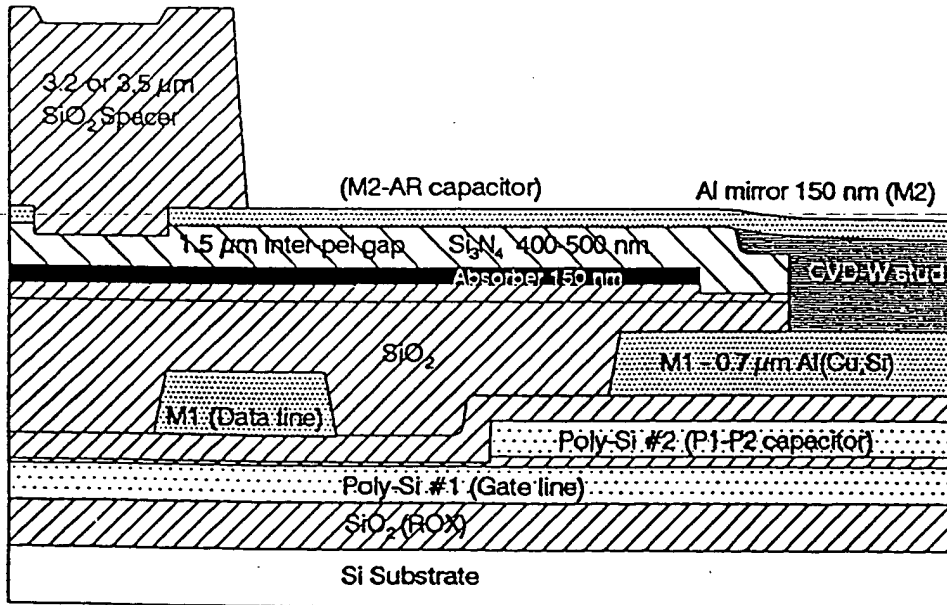


FIG 10

f) Deposit 2.2 or 3 μm oxide,  
pattern with SP mask. Open  
up M1 pads with TV mask.

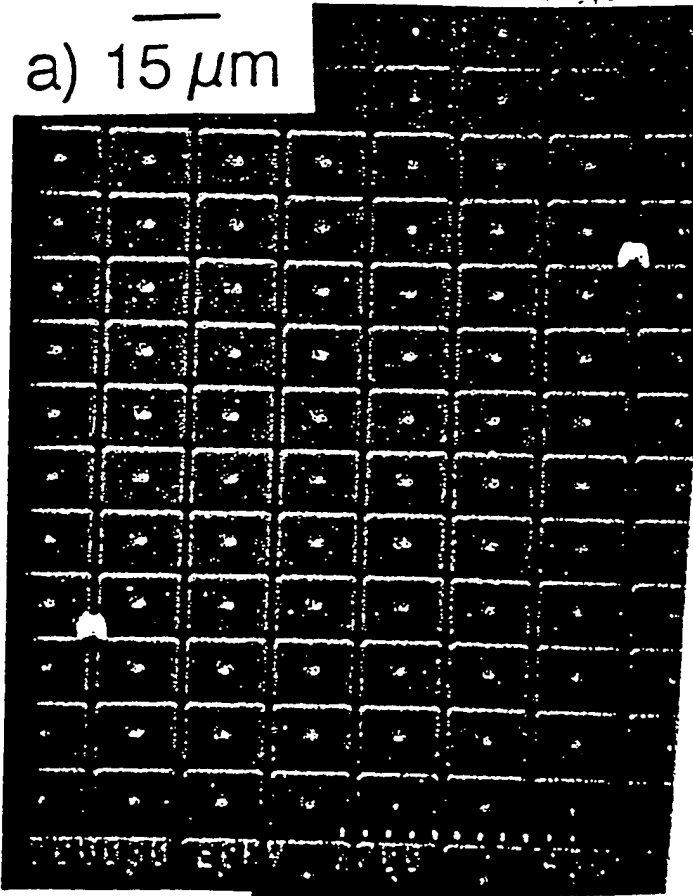
Fig. 5(d-f)

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a) 15  $\mu$ m





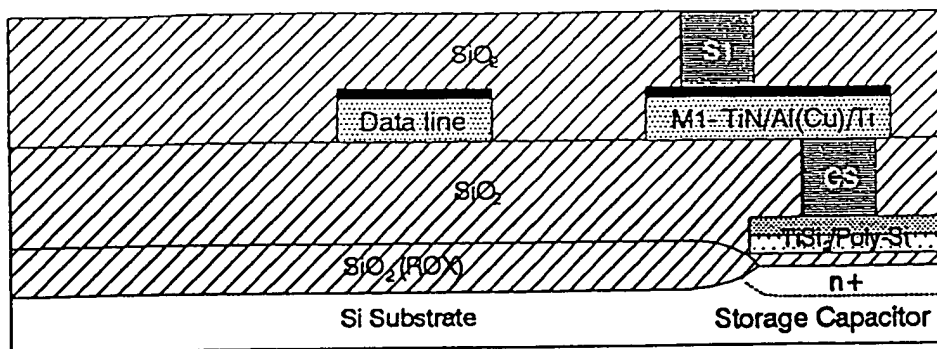


FIG 12

a) Use standard CMOS 4 process to S1.

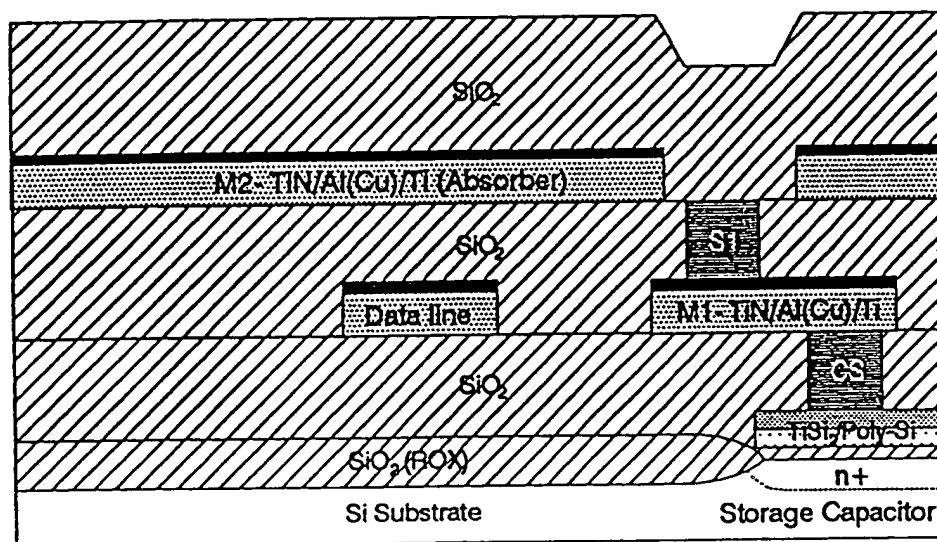
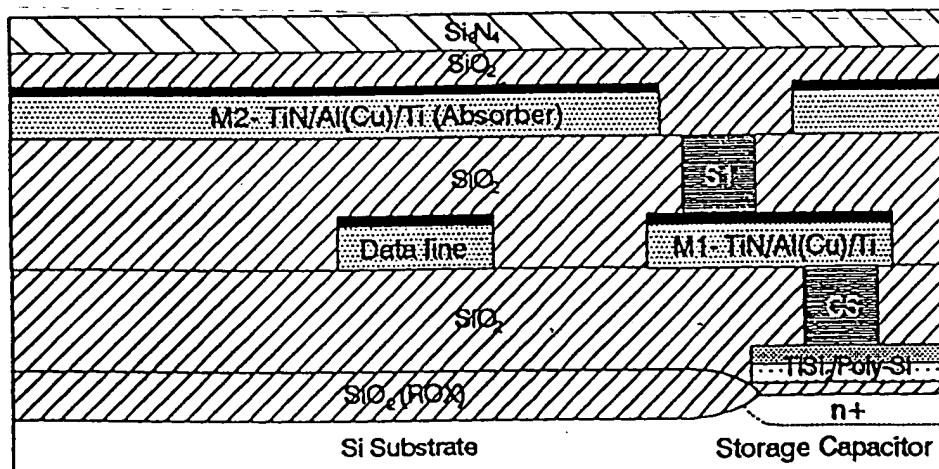


FIG 13

b) Pattern POR M2 as Absorber layer. POR oxide deposition.



c) CMP-oxide leaving 500 nm. on highest M2 point. Deposit 300 nm nitride.

Fig. 8(a-c)

FIG 14

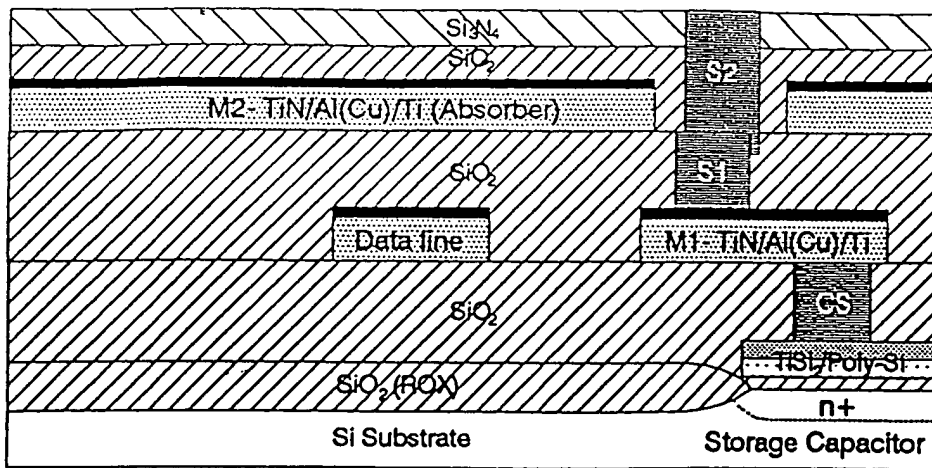


FIG 15

d) Pattern with S2 mask.  
Deposit liner & CVD-W.  
W Chem-mech polish.  
Stacked S1&S2 to  
connect M1 & M3.

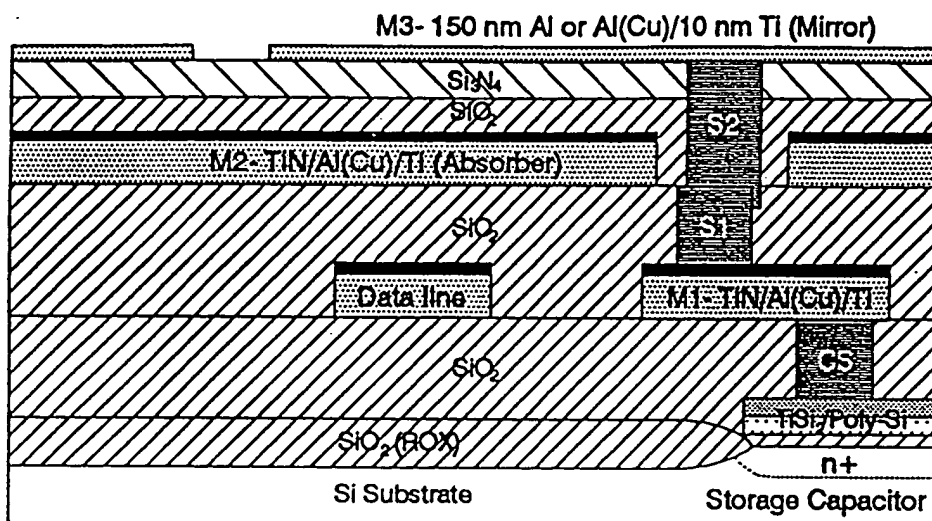


FIG 16

e) Deposit 10 nm Ti/ 150 nm  
Al, pattern with M3 mask.

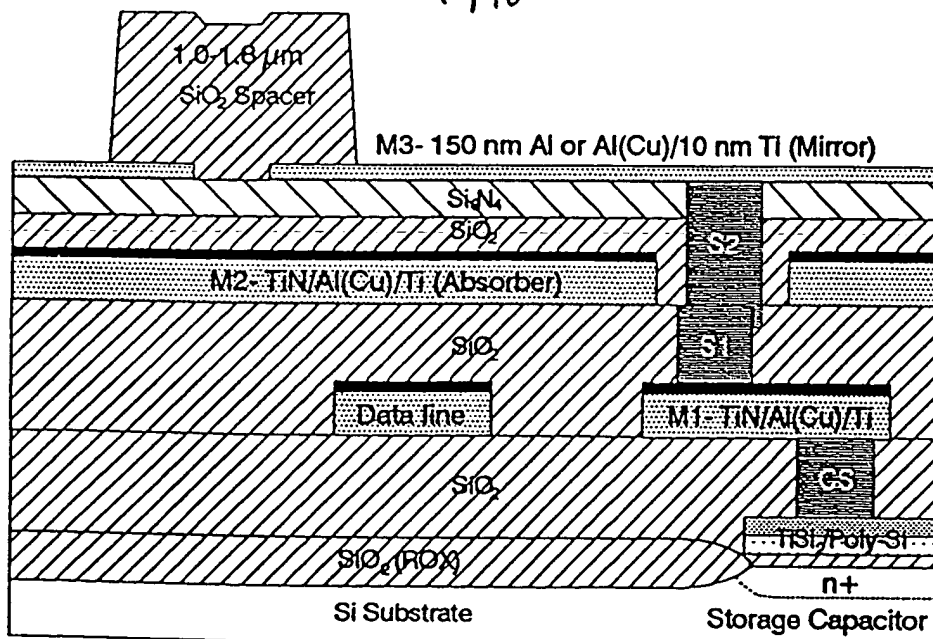


FIG 17

f) Deposit 1.0 or 1.8 μm oxide,  
pattern with SP mask. Open  
up M2 pads with TV mask.

Fig. 8(d-f)

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